

## EAST Search History

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|--|---|------------------|---------|------------------|
| L1    | 36   | b01d061/02 and c02f005/00  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/17 13:29 |
| L2    | 99   | b01d061/?? and c02f005/00  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/17 13:29 |
| L3    | 14   | b01d061/?? and c02f005/00 and stage  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/17 13:30 |
| L5    | 0    | ("6702944").URPN.  | USPAT   | OR               | ON      | 2006/06/17 13:33 |
| L6    | 18   | ("4357254"   "4451369"  <br>"4812270"   "4902417"   "5013437"<br>  "5045197"   "5069793"  <br>"5152901"   "5207916"   "5250118"<br>  "5288308"   "5310486"  <br>"5358640"   "5658460"   "5766479"<br>  "5895570"   "6059974"  <br>"6113797").PN.                         | US-PGPUB;<br>USPAT;<br>USOCR                          | OR               | ON      | 2006/06/17 13:33 |
| L7    | 18   | ("4357254"   "4451369"  <br>"4812270"   "4902417"   "5013437"<br>  "5045197"   "5069793"  <br>"5152901"   "5207916"   "5250118"<br>  "5288308"   "5310486"  <br>"5358640"   "5658460"   "5766479"<br>  "5895570"   "6059974"  <br>"6113797" "5288308" "5766479").<br>PN. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR               | ON      | 2006/06/17 15:46 |
| L8    | 13   | 210/321.81,321.9.ccls. and rejection   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/17 13:58 |
| L9    | 26   | (hardness calcium salt) adj2 rejection and membrane and (plurality multiple) near2 stage   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/17 14:09 |
| L10   | 10   | ("3795317"   "3820661"  <br>"3839201").PN. OR ("3898158").<br>URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR               | ON      | 2006/06/17 14:08 |

## EAST Search History

|     |    |  |   |    |    |                  |
|-----|----|--|---|----|----|------------------|
| L11 | 2  | 10 and gallons   | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/17 14:08 |
| L12 | 14 | (hardness calcium salt) adj2<br>rejection and (retentate<br>concentrate) and (permeate) and<br>(plurality multiple) near2 stage                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/17 14:10 |
| L13 | 32 | (hardness calcium salt) adj2<br>rejection and (retentate<br>concentrate) and (permeate) and<br>(plurality multiple second) near2<br>stage                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/17 14:10 |
| L14 | 14 | 13 and (gallons gal)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/17 14:10 |
| L15 | 20 | ("3654148"   "4046685"  <br>"4156645"   "4169789"   "4341629"<br>  "4723603"   "4973408"  <br>"5098575"   "5238574"  <br>"5458781").PN. OR ("6190556").<br>URPN. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/17 14:21 |
| L16 | 7  | 15 and (gal gallon)  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/17 14:27 |
| L17 | 28 | ("3836457"   "3839201"  <br>"3846295"   "3887463"  <br>"3898158").PN. OR ("4046685").<br>URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/17 14:26 |
| L18 | 2  | 17 and (gal gallon) and day  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/17 14:27 |
| L19 | 2  | 17 and (((gal gallon) and day)<br>gfd\$4)  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/17 14:27 |

## EAST Search History

|     |     |  |                              |    |    |                  |
|-----|-----|--|------------------------------|----|----|------------------|
| L20 | 110 | ("3339341"   "3832830"   "4031012"   "4061574"   "4080296"   "4179380"   "4235983"   "4259097"   "4264338"   "4268279"   "4269712"   "4293419"   "4306973"   "4352736"   "4367139"   "4451369"   "4508548"   "4565630"   "4578190"   "4647380"   "4676808"   "4707267"   "4718921"   "4734106"   "4752305"   "4781834"   "4865736"   "4871379"   "4894068"   "4929259"   "4961760").PN. OR ("4451369"   "5013437").URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/06/17 15:33 |
| L21 | 6   | 20 and rejection   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/06/17 15:39 |
| L22 | 40  | ("3422008"   "3455460"   "4268279").PN. OR ("4352736").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/06/17 15:39 |
| L23 | 3   | 22 and rejection   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/06/17 15:41 |
| L24 | 1   | "4814079".pn.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/06/17 15:44 |
| L25 | 22  | "0204100"  | EPO; JPO;<br>DERWENT         | OR | ON | 2006/06/17 15:44 |
| L26 | 11  | zenon and behmann and "2002"   | EPO; JPO;<br>DERWENT         | OR | ON | 2006/06/17 15:44 |
| L27 | 4   | 7 and (co2 carbon adj dioxide)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/06/17 15:48 |
| L28 | 10  | "0812805"  | EPO; JPO;<br>DERWENT         | OR | ON | 2006/06/17 15:49 |
| L29 | 5   | "812805"   | EPO; JPO;<br>DERWENT         | OR | ON | 2006/06/17 15:51 |
| L30 | 1   | 1998-034896.NRAN.  | DERWENT                      | OR | ON | 2006/06/17 15:49 |
| L31 | 2   | "57190605"   | EPO; JPO;<br>DERWENT         | OR | ON | 2006/06/17 15:53 |
| L32 | 2   | "63171605"   | EPO; JPO;<br>DERWENT         | OR | ON | 2006/06/17 15:53 |

## EAST Search History

|     |    |  |   |    |    |                  |
|-----|----|--|---|----|----|------------------|
| L36 | 14 | (US-20040129637-\$).did. or<br>(US-6702944-\$ or US-3612282-\$ or<br>US-3616928-\$ or US-3898158-\$ or<br>US-6190556-\$ or US-5013437-\$ or<br>US-4451369-\$ or US-4352736-\$).<br>did. or (US-3528553-\$ or<br>US-3355382-\$ or US-3567632-\$).<br>did. or (JP-57190605-\$).did. or<br>(EP-812805-\$).did.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT      | OR | ON | 2006/06/17 17:11 |
| L37 | 2  | 14 and (carbon adj dioxide and<br>co2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT      | OR | ON | 2006/06/17 17:12 |
| L38 | 18 | (US-20010052494-\$ or<br>US-20020189647-\$ or<br>US-20020153319-\$ or<br>US-20020088759-\$).did. or<br>(US-5205937-\$ or US-6045698-\$ or<br>US-6200393-\$ or US-6454871-\$ or<br>US-4740308-\$ or US-5766479-\$ or<br>US-RE33177-\$).did. or<br>(WO-9718887-\$ or EP-812805-\$).<br>did. or (JP-04271819-\$ or<br>JP-05103958-\$ or JP-10118471-\$ or<br>JP-60022905-\$).did. or<br>(JP-04271819-\$).did. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT           | OR | ON | 2006/06/17 17:12 |
| L39 | 1  | 38 and (carbon adj dioxide and<br>co2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT      | OR | ON | 2006/06/17 17:14 |
| L40 | 0  | 36 and (carbon adj dioxide and<br>co2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT      | OR | ON | 2006/06/17 17:12 |
| L41 | 3  | 38 and (carbon adj dioxide and<br>CO?)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT      | OR | ON | 2006/06/17 17:15 |
| S1  | 1  | 10/681203  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/17 12:13 |

## EAST Search History

|    |    |                               |   |    |    |                  |
|----|----|-------------------------------|---|----|----|------------------|
| S2 | 2  | "6702944".pn.                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/17 11:55 |
| S3 | 1  | "5766479".PN.                 | USPAT;<br>USOCR                                       | OR | ON | 2006/06/17 11:59 |
| S4 | 47 | Husain near2 Hidayat          | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/17 12:13 |
| S5 | 41 | S4 and (filter\$3 filtration) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/17 12:13 |